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(54) Title: USE OF MOLT-ACCELERATING COMPOUNDS, ECDYSTEROIDS, ANALOGS THEREOF, AND CHITIN SYNTHESIS INHIBITORS FOR CONTROLLING TERMITES

(57) Abstract: The subject invention relates in part to the oral administration of ecdysteroids for controlling subterranean termites. Preferred ecdysteroids for use according to the subject invention are ecdysone, certain ecdysone analogs, and 20-hydroxyecdysone, for example. In some preferred embodiments, one or more of these compounds is used in a termite bait in combination with one or more chitin synthesis inhibitors. Thus, the subject invention also relates in part to controlling termites by the use of a chitin synthesis inhibitor (CSI), such as hexaflumuron and/or noviflumuron, together with an ecdysteroid (and analogs thereof) or molt-accelerating compound (MAC), such as halofenozide. The subject invention also relates to mixtures comprising these two active ingredients. The MAC / ecdysteroid analog induces a preliminary molting event in termite workers (they could not complete the molting), which then allows the CSI to further disrupt the molt and cause mortality. The combination of these active ingredients, causing accelerated molting together with inhibition of chitin synthesis, is surprisingly shown herein to enhance activity against termites, as compared to either group of compounds alone.



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